

### **REMARKS/ARGUMENTS**

Applicant has carefully reviewed and considered the Office Action mailed on November 18, 2004, and the references cited therewith.

No claims are amended, claims 12, 23, and 28 are canceled, and no claims are added; as a result, claims 1-11, 13-22, 24-27, and 29-42 are now pending in this application.

#### **§103 Rejection of the Claims**

Claims 1, 11, 12, 14-17, 20, 22, 23, 26-28, 31-33, 37, 38, 41, and 42 were rejected under 35 USC §103(a) as being unpatentable over Gandy, et al. (U.S. Patent No. 5,376,957) in view of Ort (U.S. Patent No. 4,340,893).

In the office action, the Examiner rejected independent claims 1, 14, 22, 27, 31, 38, and 42 stating that that it would have been obvious to combine the teachings of Ort with the teachings of the Gandy, et al. reference. The Examiner then stated that the motivation for doing so is to gain the benefit of avoiding ink smearing by rollers by concentrating drying around the printing point. The Examiner cited Col. 1, lines 20-21 of the Ort reference to support the motivation to combine the references. The Applicant respectfully traverses the rejection on the following grounds.

The Gandy, et al. reference specifically describes the use of two heaters strategically positioned to heat print media before the application of ink, and to heat the ink after its application. (See Col. 3, lines 65-68 and Col. 4, lines 1-5). Specifically, the Gandy, et al. reference describes a first pair of heaters positioned below the printheads to heat the substrate before application of ink. (See Col. 3, lines 65-68). The Gandy, et al. reference places the first pair of heaters below the printheads to heat the substrate before printing because when the substrate is heated, the ink adheres more readily to its surface. (See Col. 4, lines 1-3).

Further, the Gandy, et al. reference teaches the use of a second pair of heaters. The second pair of heaters is placed above the printheads to dry the ink after its application. (See Col. 4, lines 3-5).

The Ort reference describes a carriage mounted heater positioned adjacent a printhead. According to the Ort reference, the purpose for mounting the heater adjacent the printhead is to provide for drying of ink close to the actual printing point.

In contrast, Applicant's independent claim 1, recites, among other things:  
a bifurcated heating element support by the carriage a first portion of said heating element being carried by said first portion of said carriage, a second portion of said heating element being carried by said second portion of said carriage, said first and second heating elements being maintained in face-to-face relation across said printzone.

Applicant's independent claim 14, recites, among other things:

a first carriage located on a first side of said printzone, said first carriage supporting an inkjet printhead and a first heating element portion; and  
a second carriage located on a second side of said printzone, said second carriage holding a second heater element portion, said first and second heater element portions forming a heater element and being maintained in face-to-face opposition across said printzone.

Applicant's independent claim 22, recites, among other things:

synchronously scanning a second carriage relative to said first carriage, said second carriage holding a second heater element cooperative with said first heater element to generate and apply said heat energy to said media, said first and second carriage being maintained in face-to-face relation with said media interposed therebetween.

Applicant's independent claim 27, recites, among other things:

synchronously scanning a second carriage relative to said first mentioned carriage, said second carriage holding a heater element cooperative with said heater on said first carriage to apply said heat energy to said media, said first and second carriage being maintained in face-to-face relation with said media interposed therebetween.

Applicant's independent claim 31, recites, among other things:

thereafter, moving a heat zone across said media to accelerate evaporation of said evaporatable component, said heat zone being generated by cooperative first and second heating elements moving synchronously and relative to said print media and cooperative to produce said heat zone, said first and second heating elements being maintained in face-to-face relation with said print media and interposed therebetween.

Applicant's independent claim 38, recites, among other things:

means for applying heat energy to said media and supported by said carriage means, said means for applying heat energy being bifurcated and including cooperative first and second heater elements, said first heater element being positioned at a first side of said media and said

second heater element being maintained in face-to-face opposition therewith at a second side of said media.

And, Applicant's independent claim 42, recites, among other things:

a reciprocating bifurcated heating element projecting energy therefrom and applied s heat energy to media adjacent thereto along a heat swath height, said heat swath height being greater than said print swath height whereby print imaging produced by said ink droplets received said heat energy through at least a first and second reciprocation of said heating element, said bifurcated heating element including a first portion maintained at a first side of said print swath and a second portion maintained at a second side of said print swath in face-to-face opposition to said first portion.

The Applicant submits that the combination of the Gandy, et al. and Ort references do not teach each and every limitation of Applicant's independent claims 1, 14, 22, 27, 31, 38, or 42. Further, Applicant can find no suggestion in either reference, to create the structures in Applicant's independent claims. For example there is no suggestion to create, as stated in claim 1,

a bifurcated heating element support by the carriage a first portion of said heating element being carried by said first portion of said carriage, a second portion of said heating element being carried by said second portion of said carriage, said first and second heating elements being maintained in face-to-face relation across said printzone.

Further, the Applicant submits that combining the Ort reference with the Gandy, et al. reference by altering the Gandy, et al. reference to include a carriage mounted heater would destroy the stated purpose of the Gandy, et al. reference. As described above, the heaters in the Gandy, et al. reference are positioned away from the carriage, which houses the printheads, such that the heaters can heat print media prior to applying ink.

In addition, another set of heaters are positioned away from the print zone such that they can dry the ink after it has been applied to the print media. By positioning the heaters of the Ort reference on the carriage of the Gandy, et al. reference as proposed by the Examiner, the stated purpose of the Gandy, et al. reference would be destroyed as well as changing the principle of operation of the Gandy, et al. reference (i.e., to heat the print media before application of the ink, and to dry the ink after it has been applied).

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the §103 rejection of claim, 1, 14, 22, 27, 31, 38, and 42, as well as those claims that depend therefrom.

Claims 2, 5, 8-10, 13, 19, 24-25, 29, 30, 34-36, 39, and 40 were rejected under 35 USC §103(a) as being unpatentable over Gandy, et al. (U.S. Patent No. 5,376,957) in view of Ort (U.S. Patent No. 4,340,893) and further in view of Meyers, et al. (U.S. Patent No. 6,463,674). Claims 3 and 4 were rejected under 35 USC §103(a) as being unpatentable over Gandy, et al. (U.S. Patent No. 5,376,957) in view of Ort (U.S. Patent No. 4,340,893) and Meyers, et al. (U.S. Patent No. 6,463,674) and further in view of Carreira, et al. (U.S. Patent No. 5,220,346).

Claims 18 and 21 were also rejected under 35 USC §103(a) as being unpatentable over Gandy, et al. (U.S. Patent No. 5,376,957) in view of Ort (U.S. Patent No. 4,340,893) and further in view of Carreira, et al. (U.S. Patent No. 5,220,346). Claims 6 and 7 were rejected under 35 USC §103(a) as being unpatentable over Gandy, et al. (U.S. Patent No. 5,376,957) in view of Ort (U.S. Patent No. 4,340,893) and Meyers, et al. (U.S. Patent No. 6,463,674) and further in view of Woo, et al. (U.S. Patent No. 5,645,904).

Since claims 2-10, 13, 18-19, 21, 24-25, 29, 30, 34-36, 39, and 40 depend from one of independent claims 1, 14, 22, 27, 31, or 38. Accordingly, based upon the arguments presented above, claims 2-10, 13, 18-19, 21, 24-25, 29, 30, 34-36, 39, and 40 are also deemed allowable.

**CONCLUSION**

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (360) 212-8052 to facilitate prosecution of this matter.

At any time during the pendency of this application, please charge any additional fees or credit overpayment to the Deposit Account No. 08-2025.

CERTIFICATE UNDER 37 CFR §1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS AMENDMENT Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450 on this 14<sup>th</sup> day of February, 2005.

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